Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A far field radio frequency identification (RFID) tag having an associated tag identification (ID) responsive to a group of a plurality of continuous wave (CW), unmodulated signals selected from frequencies comprising a predetermined frequency band~~, the RFID tag including a power source supplying power~~ that correspond to the tag ID of the RFID tag.

2. (Currently Amended) ~~The~~ A far field radio frequency identification (RFID) tag ~~as recited in claim 1~~ responsive to a plurality of continuous wave (CW), unmodulated signals selected from frequencies including a predetermined frequency band, the RFID tag comprising:

an antenna generating received CW signals responsive to the CW unmodulated signals;

a filter bank generating noise-free CW signals responsive to the received CW signals;

a rectifier bank generating a binary word responsive to the noise-reduced CW signals;

a logic circuit generating a command signal when the received binary word corresponds to a tag identifier code programmed into the logic circuit; and

a state machine coupled to the antenna and responsive to the command signal generating information identifying the RFID tag for transmission via the antenna.

3. (Original) The RFID tag as recited in claim 2, further comprising a timer generating a clock signal applied to the state machine.

4. (Original) The RFID tag as recited in claim 2, further comprising a counter generating a count signal applied to the state machine in response to a supplied one of the CW unmodulated frequency signals.

5. (Original) The RFID tag as recited in claim 2, wherein the logic circuit comprises a field programmable gate array (FPGA).

6. (Original) The RFID tag as recited in claim 5, wherein the FPGA includes the state machine.

7. (Original) The RFID tag as recited in claim 2, further comprising a first switch electrically connected between the logic circuit and the state machine for selectively applying power to the state machine responsive to the command signal.

8. (Currently Amended) A method of operating a far field radio frequency identification (RFID) tag responsive to a plurality of continuous wave (CW), unmodulated signals selected from frequencies comprising a predetermined frequency band, comprising:

receiving the plurality of CW unmodulated signals;

~~identifying~~ determining whether a binary word ~~included in~~ indicated by the received plurality of CW unmodulated signals taken together as a group of frequency matches~~;~~

~~comparing the binary word to~~ a tag identifier for the RFID tag programmed into a logic circuit; and

outputting information distinguishing the RFID tag from similar RFID tags when the binary word matches the tag identifier.

9. (Original) The method as recited in claim 8, wherein:

the binary word corresponds to M of N possible frequencies in the predetermined frequency band;

M and N are positive integers; and $N \geq M$.

10. (Currently Amended) A far field radio frequency identification (RFID) tagging and tracking system employing a plurality of continuous wave (CW), unmodulated signals selected from frequencies comprising a predetermined frequency band, the system including a RFID interrogator generating a group of CW unmodulated signals, the group of frequencies as a whole

corresponding to a RFID tag and receiving a tag identification (ID) signal sequence uniquely identifying the RFID tag~~, and the RFID tag including a power source supplying power to the RFID tag~~.

11. (Currently Amended) ~~The~~ A far field radio frequency identification (RFID) tagging and tracking system ~~as recited in claim 10~~ employing a plurality of continuous wave (CW), unmodulated signals selected from frequencies comprising a predetermined frequency band, the system including an RFID interrogator generating a group of CW unmodulated signals corresponding to an RFID tag and receiving a tag identification (ID) signal sequence uniquely identifying the RFID tag, wherein:

the RFID interrogator comprises:

first and second antennas;

a front end coupled to the first antenna that extracts the tag ID signal sequence from a received signal;

a controller receiving the tag ID signal sequence and generating control signals;

a multiple frequency generator generating a plurality of CW unmodulated frequency signals;

a switch array responsive to the control signals that route selected ones of the CW unmodulated frequency signals to a frequency summer; and

the frequency summer, which applies the selected ones of the CW unmodulated frequency signals to the second antenna; and

the RFID tag comprises:

a third antenna generating received CW signals responsive to the selected ones of the CW unmodulated frequency signals output by the second antenna;

a filter bank generating noise-free CW signals responsive to the received CW signals;
a rectifier bank generating a binary word responsive to the noise-reduced CW signals;

a logic circuit generating a command signal when the received binary word corresponds to a tag identifier code programmed into the logic circuit; and

a state machine coupled to the third antenna and responsive to the command signal generating the tag ID signal sequence for transmission via the third antenna to the RFID interrogator.

12. (Original) The RFID tagging and tracking system as recited in claim 11, further comprising a timer generating a clock signal applied to the state machine.

13. (Original) The RFID tagging and tracking system as recited in claim 11, further comprising a counter generating a count signal applied to the state machine in response to a supplied one of the CW unmodulated frequency signals.

14. (Original) The RFID tagging and tracking system as recited in claim 11, wherein the logic circuit comprises a field programmable gate array (FPGA).

15. (Original) The RFID tagging and tracking system as recited in claim 14, wherein the FPGA includes the state machine.

16. (Original) The RFID tagging and tracking system as recited in claim 11, further comprising a first switch electrically connected between the logic circuit and the state machine for selectively applying power to the state machine responsive to the command signal.

17. (Original) The RFID tagging and tracking system as recited in claim 11, wherein the CW unmodulated frequency signals and the tag ID signal sequence occupy first and second frequency bands.

18. (Original) The RFID tagging and tracking system as recited in claim 11, wherein: the first antenna comprises a directional antenna; and the controller determines a bearing line to the RFID tag.

19. (Original) The RFID tagging and tracking system as recited in claim 11, wherein the controller provides a data storage function and a display function.

20. (Previously Presented) A method for operating a far field radio frequency identification (RFID) tagging and tracking system responsive to a plurality of continuous wave (CW), unmodulated frequency signals selected from frequencies comprising a predetermined frequency band, wherein a RFID interrogator includes a multiple frequency generator producing the frequencies included in the predetermined frequency band, a controller, a switch array operated by the controller, and a frequency summer for combining the CW unmodulated frequency signals output by the switch array, while a RFID tag includes an antenna, a filter bank, a rectifier bank, a logic circuit, and a state machine, electrically coupled to one another in the recited order, the state machine being coupled to a RFID tag antenna, a power source supplying power to the RFID tag, comprising:

transmitting CW unmodulated frequency signals corresponding to a binary word;

extracting the binary word from the CW unmodulated frequency signals;

comparing the binary word to a tag identifier for the RFID tag programmed into the logic circuit; and

when the binary word matches the tag identifier, controlling the state machine to output a tag identification (ID) signal sequence distinguishing the RFID tag from similar RFID tags.

21. (Original) The method as recited in claim 20, wherein:

the binary word corresponds to M of N possible frequencies in the predetermined frequency band;

M and N are positive integers; and $N \geq M$.

22. (Currently Amended) A far field radio frequency identification (RFID) tag having a binary identification, the tag comprising:

an antenna to receive a plurality of different, unmodulated, continuous wave (CW) electromagnetic frequencies from an interrogator;

a first circuit to provide an indication that the plurality of received CW frequencies together as a group of frequencies correspond to the binary identification; and

a second circuit to send a ~~response~~ message to the interrogator in response to the indication.

23. (Previously Presented) The RFID tag of claim 22 wherein the frequencies are selected to from a predetermined frequency band and the binary identification corresponds to M of N possible frequencies in the predetermined frequency band where M and N are positive integers and $N \geq M$.

24. (Previously Presented) The RFID tag of claim 23 wherein the frequencies are selected by dividing the frequency band into a number of discreet frequency sub-bands.

25. (Currently Amended) A far field radio frequency identification (RFID) system comprising:

an interrogator to transmit a plurality of different, unmodulated, continuous wave (CW) electromagnetic frequencies ~~that corresponding~~ wherein the plurality of unmodulated CW frequencies as a group of signals correspond to a binary identification; and

an RFID tag corresponding to the binary identification to receive the plurality of different unmodulated, continuous wave (CW) electromagnetic frequencies and to transmit a message to the interrogator in response to the received frequencies.

26. (Previously Presented) The RFID system of claim 25 wherein the frequencies are selected to from a predetermined frequency band and the binary identification corresponds to M of N possible frequencies in the predetermined frequency band where M and N are positive integers and $N \geq M$.

27. (Previously Presented) The RFID system of claim 26 wherein the frequencies are selected by dividing the frequency band into a number of discreet frequency sub-bands.

28. (New) The RFID tag of claim 1 wherein each frequency corresponds to a bit of the RFID tag ID.

29. (New) The method of claim 8 wherein each frequency corresponds to a bit of the tag identifier.

30. (New) The RFID tagging and tracking system of claim 10 wherein each frequency corresponds to a bit of the tag ID.

31. (New) The RFID tag of claim 22 wherein each frequency corresponds to a bit of the binary identification ID.

32. (New) The RFID system of claim 25 wherein each frequency corresponds to a bit of the binary identification ID.